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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,856	09/21/2000	Yehuda Binder	BINDER 10	5949
7590 03/25/2004				
Browdy and Neimark PLLC 624 Ninth Street NW Washington, DC 20001-5303			EXAMINER SHEW, JOHN	
			ART UNIT 2664	PAPER NUMBER
			DATE MAILED: 03/25/2004 4	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/666,856	BINDER, YEHUDA	
	Examiner	Art Unit	
	John L. Shew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

### ***Claim Objections***

1. Claim 18 objected to because of the following informalities: Claim has a limitation on "the wall connector". There is no antecedent basis for this limitation from the prior dependent claims 14 and 15. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Guntersdorfer. Guntersdorfer teaches a circuit for providing simultaneous data and telephone communication between two locations (sole patent figure) referenced by remote subscriber station location Tn and near exchange switching center location A, comprising a plurality of pairs of conductors referenced by conductors e and f, opposite

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ends of each pair of conductors being respective ones of the two locations referenced by locations of transformers U1, U3, U2 and U4, carry data between the two locations (column 2 lines 9-12) referenced by video data one in each direction, at least two of said pairs cooperatively forming a phantom channel operative to carry telephone signals (column 2 lines 20-23, lines 52-54) referenced a phantom circuit connected to a telephone. Further Guntersdorfer teaches a transformer at each end of each two pairs of conductors each signal transformer having a primary winding and a secondary winding (sole patent figure) referenced by transformers U1, U3, U2 and U4 where the primary winding side is the cable side and the secondary winding side is the device side, the primary winding having a center-tap referenced by center-tap cables connecting devices F and W, respective ends of the secondary winding form connection to data channels referenced by data device B and exchange switching center A and center-taps connection points to a corresponding phantom channel (column 2 lines 20-23, lines 52-55) referenced the telephone connection to the center-tap phantom channel. The simultaneous data/telephone communication circuit of plurality of N pairs, allowing N equal to value of 2, sets the phantom channel to N-1 channels equal to 1, which is taught by Guntersdorfer as referenced above.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer in view of Diab.

Claims 1, 2 and 9, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central location and at least one remote location (sole patent figure) referenced by B for the video data, F for the audio telephone, Tn for the remote subscriber station, A for the central exchange switching center, comprising a central device referenced by the A the central exchange switching center, a central telephone device, referenced by W branch circuit encompassing (column 2 lines 34-38) voice frequencies and telephone control signals, for each remote location a remote digital device, a remote telephone device is inherent from the presence of A the exchange switching center which is known in the art to support a plurality of Tn subscriber stations, a cable including at least two pairs of conductors (column 2 lines 16-18) referenced by Ltg, each pair operative as a data channel for carrying data signals between remote device and central device (column 2 lines 9-12) referenced by transmission of video data, at least two pairs cooperatively forming a phantom channel (column 2 lines 26-30) referenced by central taps of transformers U1, U3 and central taps of transformers U2, U4, operative to carry telephone signals between remote telephone device and central telephone device

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(column 2 lines 34-38) referenced by telephone signals. Guntersdorfer teaches two signal transformers at each end of the cable each signal transformer having a primary winding and a secondary winding (column 2 lines 26-30) referenced by transformers U1, U2, U3 and U4, the primary winding having a center-tap, wherein the two conductors of each pair are connected at each of their ends to the ends of the primary winding of a corresponding transformer (sole patent figure) referenced by cable of device F to transformers U1, U3. Guntersdorfer teaches the center-taps of the two near end transformers cooperatively form a central port of the phantom channel connected to a central telephone device (sole patent figure, column 2 lines 34-38)) referenced by cable between U2, U4 and branch circuit W carrying voice frequencies and telephone signals. Guntersdorfer does not teach the use of a digital device. Diab teaches the use of a digital device (column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. The use of Ethernet inherently implements the use of a digital device inclusive of a computer at the remote end subscriber station and a digital device inclusive of a hub at the central end switching center. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

Claims 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer and Diab as applied to claims 1, 2 and 9 above. Further, Diab teaches

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the two transformers at the remote end are directly housed inside the remote digital device (FIG. 2B) referenced by transformers 14 housed on the PCB of the digital device. The location of the transformers is unimportant in view of their functionality. The implementation of the location of the transformers is effective on the cable or within the housing of the digital device or within the housing of the telephone device. Applicant has not disclosed that incorporation of the transformers within the housing of the telephone device provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art would have expected applicant's invention to perform equally well when incorporated within the housing of the telephone device as specified in claims 6 and 8.

Claim 7 is rejected as being unpatentable over Guntersdorfer. Guntersdorfer teaches two transformers at the near ends of the cable are directly housed inside the central digital device (sole patent figure) referenced by the position of transformers U2 and U4 located within exchange switching center A.

3. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer and Diab as applied to claims 1, 2 and 9 above, and further in view of Binder. Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach a wall outlet containing transformers. Binder

teaches center-tap transformers (page 2 column 2 lines 26-29, page 3 column 2 lines 41-45) referenced by the power/data splitter/combiner implemented by center-tap transformers contained within a wall outlet (page 4 column 2 lines 20-29). Further the Binder teaches the use of a wall outlet conforming to an existing connector data communication network (page 4 column 2 lines 20-29) the referenced outlet being a telephone outlet which is a standard well known to one skilled in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformer within a wall module for the Ethernet interface for the purpose of combining functions within an existing outlet.

4. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer in view of Diab. Guntersdorfer teaches a communication network for providing data and analog telephone communication between a first location and a second location (sole patent figure) referenced by subscriber station location Tn and exchange switching center location A, comprising a cable referenced by Ltg two line pairs each pair providing data communications between respective devices (column 2 lines 9-12) referenced by video data in each direction. Guntersdorfer does not teach a kit for additionally providing a telephone channel cable based on center-taps of transformers. Diab teaches an ethernet connector which implements the interface kit function (FIG. 6, column 7 lines 42-59), referenced by connector 120, simultaneously providing over two pairs of conductors referenced by 130a, 130c, 130e and 130g, a



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telephone channel between respective telephone devices (column 6 lines 10-14) referenced telephone communication, comprising two pairs of signal transformers referenced by 18a and 18b, one pair for each end of the cable is inherent by providing identical kit at each cable end, each having a primary winding referenced by pins 1 and 2, and a secondary winding referenced by pins 130a and 130c, the primary winding having a center-tap referenced by pin 130d, wherein respective ends of primary winding are adapted to be connected to respective end of conductors referenced by conductor cable pins 1, 2, 3 and 6, respective ends of secondary winding are adapted to for connection to a remote digital device (FIG. 2B) referenced a PCB implementing an Ethernet interface, respective center-taps are adapted for connection to a respective telephone device (FIG. 6, column 6 lines 10-14) referenced by pins 130d and 130h supporting -48v used for telephone communications. Diab teaches housing the signal transformers in a discrete module (column 4 lines 23-29) referenced by the integrated magnetics module. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

5. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer and Diab, and further in view of Binder.

Claims 16 and 17 are rejected as being unpatentable over Guntersdorfer and Diab as applied to claims 14 and 15 above, and further in view of Binder. Guntersdorfer teaches

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a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach a wall connector. Binder teaches a wall connector which is directly attachable to a surface of a building (page 4 column 2 lines 20-29) referenced by the wall outlet or telephone outlet. Further the wall connector is dimensioned to conform to an existing wall connector of a data communication network (page 4 column 2 lines 20-29) referenced by the telephone outlet which is standard and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformer within a wall module for the Ethernet interface for the purpose of combining functions within an existing standard outlet.

Claims 18, 19 and 20 are rejected as being unpatentable over Guntersdorfer, Diab and Binder. Diab teaches an Ethernet RJ-45 connector (column 1 lines 28-35), a connector having at least two pairs of contacts and a second female connector having at least one pair of contacts (FIG. 6 connector 120, column 8, input/output pinout table), referenced by connector output pins 1, 2, 3 and 6, second connector input pins 2 and 4, at least one pair of signal transformers each having a primary winding (FIG. 6) referenced by transformers 18a and 18b associated to output pins 1, 2, 3 and 6, a secondary winding of each signal transformer connected to a respective one of pair of first female connector (column 8, input/output pinout table) referenced by input pins 1, 3, 5 and 7, respective center-taps of each of the primary windings connected to a corresponding

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pair of contacts in the second female connector (column 8, input/output pinout table) referenced by input pins 2, 4, 6 and 8.

Binder teaches a substitute socket outlet (column 4 lines 20-29), referenced by a serial intelligent cell housed within a housed within a telephone outlet.

Diab teaches a wall connector is a plug assembly (FIG. 2B) referenced a RJ-45 plug assembly 10 which is usable at a wall outlet, including a plug having at least two pairs of contacts each connected to primary windings of a respective on of the signal transformers (FIG. 6) referenced by pins 1, 2, 3 and 6 connecting to signal transformers 18a and 18b, for removably coupling with a socket outlet of a data network (FIG. 2B) referenced by socket 10 and coupler 44.

6. Claim 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer in view of Diab. Guntersdorfer teaches a communication network connecting two pairs of conductors for conveying data to and from another device (sole patent figure, column 2 lines 9-12) referenced by line pairs e and f transmitting video data, the device being also connectable to at least one local telephone device operative to transmit signals between another telephone device over two pairs of conductors in a phantom channel mode (sole patent figure, column 2 lines 26-30) referenced by audio telephone F and branch circuit W using phantom channel. Guntersdorfer does not teach a digital device. Diab teaches the use of a digital device (column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. Further, Diab teaches a digital device comprising two

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signal transformers each having a center-tapped primary winding whose ends is connectable to a telephone device (FIG. 6, column 6 lines 9-14) referenced by transformers 18a and 18b with center-taps 20c and 20d providing -48v to a telephone device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

7. Claims 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diab in view of Binder. Diab teaches a combination connector for pluggably connecting a digital device and a telephone device to respective ends of at least two conductor pairs to simultaneously convey data to/from digital device and telephone signals to/from telephone device (FIG. 6, column 1 lines 24-35, column 6 lines 10-14) referenced by IEEE802.3 RJ-45 Ethernet connector interface to a digital device across pins 1, 2, 3, 6 and phantom power enabling telephone communications across pins 130d, 130h, a first connector having two pairs of contacts referenced by pins 1, 2, 3 and 6, a second connector having one pair of contacts referenced by pins 130d and 130h, at least one pair of signal transformers referenced by transformers 18a and 18b, each having a primary winding whose ends are adapted to be connected to respective conductor pairs referenced by pins 1, 2, 3 and 6, a secondary winding of each transformer connected to a respective one of the first connector referenced by pins 130a, 130c, 130e and 130g, respective center-taps of each primary windings connected

to pair of contacts in the second connector referenced by pins 130d and 130 h . Further Diab teaches a plug assembly for removably coupling with a socket of the data network (FIG. 2B) referenced by plug assembly 44, socket 10 of PCB for Ethernet digital device. Diab does not teaches a combination outlet. Binder teaches a combination outlet dimensioned to conform to an existing wall connector (page 2 column 2 lines 26-29, page 3 column 2 lines 38-45, page 4 column 2 lines 20-29) referenced by a SIC power/data splitter/combiner for a telephone wall outlet which is a well known standard in the arts. It would have been obvious to one of ordinary skill in the art at the time the invention was made that the integrated RJ-45 plug of Diab be modified for connection to a wall outlet for the purpose of carrying data and telephone devices.

8. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer in view of Diab. Guntersdorfer teaches a method for enabling a bundle of at least two pairs of conductors (sole patent figure, column 2 lines 5-12, lines 26-30) referenced by e and f, which are normally operative to convey data between two devices referenced by video telephone B and exchange switching center A, to also simultaneously convey signals between two telephone devices referenced by audio telephone F and branch circuit W, method comprising a first connection of a phantom channel in association with two pairs of conductors at a first end referenced by center-tap cable to audio telephone F, a second connection of a phantom channel in association with two pairs of conductors at a second end referenced by center-tap cable to branch circuit W, allowing two telephone devices to be connected to the first and


second phantom channels respectively referenced by audio telephone F and branch circuit W. Guntersdorfer does not teaches a digital device. Diab teaches the use of a digital device (column 1 lines 16-23, lines 36-40, FIG.2B) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. Diab teaches the use of a phantom circuit on the Ethernet connector for a telephone connection (FIG. 6, column 6 lines 3-6). Further Diab teaches inserting a first pair of signal transformers having center-tapped windings at a first end of the cable with respective ends of the primary windings connected to respective conductors of the cable (FIG. 6) referenced by connector 120 containing transformers 18a and 18b, center-taps 20c and 20d, and primary winding pins 1, 2, 3 and 6. A second connector with identical circuitry is inherently required at the far end of the cable to support matching communications. Thereby respective secondary windings of each signal transformer will be connected to digital devices and allowing center-taps of signal transformers to be connected to telephone equipment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 703-305-8708. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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